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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,724	10/30/2001	Trent W. Davis	930007-2001	4458
20999	7590	12/22/2005		
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER BASINGER, SHERMAN D	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/016,724	Applicant(s) DAVIS ET AL.	
	Examiner Sherman D. Basinger	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11-3-05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Doerpinghaus.

In figures 7 and 8 the elongated flexible tubular structure is C4, the means for rendering the structure impervious is 75, the means to fill and empty the structure is 52, the opening in one end is shown in figure 8, the ring portion is 59 with the radially extending member with a curved engaging surface being 82, the ring receiving surface is 58 with the surface of corresponding geometry to the ring portion being 81. Surface 81 is also complementary to surface 82. Portion 59 and surface 58 are made of plastic or metal. With regard to new claim 15, when a clamping force as described in column 9, lines 1-13 is applied to the clamping mechanism, ring portion 59 and ring surface 58 remain rotationally fixed with respect to each other through the filler 65.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3617

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham in view of Doerpinghaus.

In Cunningham the elongated flexible tubular structure is 10, the means for rendering the structure impervious is 19 and 20, the front and rear ends of the structure are shown in figure 8, the means for filling and emptying the vessel is 16, the openings in each end of the structure receive clamps 54 and 56, and the clamping mechanism is made up of 54 and 56.

In Cunningham the ring portion is 54. The ring receiving surface is 56. The radially extending member of ring portion 54 is pointed out in the marked up figure of Cunningham attached to the office action mailed April 8, 2005.

In Cunningham the ring portion 54 and the ring receiving surface 56 of Cunningham provide a clamping force exerted by the clamping mechanism clamping the end of the flexible tubular structure 10 between ring portion 54 and the ring receiving surface 56 thereby affixing the mechanism to the end of the structure 10.

The radially extending member of Cunningham does not have a curved engaging surface which extends radially outward, and the ring receiving surface 56 of Cunningham does not have a corresponding geometry to the ring portion.

Art Unit: 3617

Note in Doerpinghaus curved engaging surfaces 81 and 82, which are complementary and have corresponding geometry.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide to the radially extending member of Cunningham a curved engaging surface similar to 82 of Doerpinghaus and to ring receiving surface 56 of Cunningham a corresponding in geometry curved engaging surface similar to that of 81 of Doerpinghaus.

Motivation to do so is to have the ring portion and ring receiving surface clamp the ends of the structure 10 of Cunningham more securely.

In Cunningham the axially located hub is 55, the axially located member of the ring receiving surface is the aperture of surface 56, the load bearing device are the threads of the aperture of surface 56, the threads of surface 56 are adjustable along the hub to adjust the amount of clamping force and the means to couple a tow cable is 18.

The ring portion 54 and the ring receiving surface 57 of Cunningham do not include openings which allow egress and ingress of fluid to and from the interior of the tubular structure. Note 38 of the ring portion 33 of Doerpinghaus. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide to 55 of Cunningham a opening similar to 38 of Doerpinghaus, such opening allowing egress and ingress of fluid to and from the interior of the tubular structure and providing an opening in the ring portion and ring surface to

do so. Motivation to do so is to replace 16 of Cunningham with such an opening. This would make the container cheaper to make.

The means for closing off flow of fluid to and from the tubular structure of claim 8 would be similar to 36 of Doerpinghaus. With regard to claim 10, the means for coupling a tow cable thereto would be similar to 37 of Doerpinghaus.

Response to Arguments

5. Applicant's arguments filed October 31, 2005 have been fully considered but they are not persuasive. Applicant's arguments that surfaces 81 and 82 of Doerpinghaus do not meet the limitation of "a corresponding surface" fall when looking at the dictionary definition or "correspond" filed by applicant. The second definition of "correspond" is "to be similar". In viewing figure 8 of Doerpinghaus, it is clear that surfaces 81 and 82 are similar and thus are corresponding surfaces.

6. Applicant's arguments concerning ring portion 59 and receiving surface 58 not being part of a clamping mechanism fall when reading the description set forth in column 9, lines 1-44 of Doerpinghaus; especially column 9, lines 1-13.

7. Applicant's arguments concerning the combination of Cunningham and Doerpinghaus also are not persuasive. As argued above, surfaces 81 and 82 of Doerpinghaus are corresponding surfaces. To add such surfaces to ring receiving surface 56 and ring portion 54 is desirable. With such surfaces, upon tightening of ring receiving surface 56, the tubular structure will be better held between portion 54 and surface 56.

8. For the above reasons, the rejections stand.

Conclusion

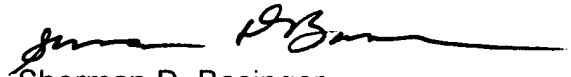
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sherman D. Basinger
Primary Examiner
Art Unit 3617

Tuesday, November 22, 2005